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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/581,539

Applicant(s)

BAMBERG ET AL.

Examiner

TAMIKO D. BELLAMY

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 6/2/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 18, 20, 23-27, 29-31, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Fleming et al. (5,337,661).

Re claim 18, as depicted in figs. 1-4, and 6, Fleming et al. discloses detecting at least one flaw in a component (e.g., actual specimen or pipe or power plant component) and evaluating ultrasonic signals of the flaw. Fleming et al. discloses generating an specification of the flaw including at least one of a two-dimensional and three-dimensional point pattern (Col. 3, lines 1-68; Col. 4, lines 1-68; Col. 5, lines 45-68; Col. 6, lines 1-68). Fleming et al. discloses manufacturing a test specimen (e.g., simulation test block 22) for each point of the pattern (Col. 2, lines 23-39; Col. 3, lines 4-68; Col. 5, lines 45-56).

Re claim 20, Fleming et al. discloses the largest dimensions of the crack are smaller than a wavelength used for recording the ultrasonic signals (Col. 4, lines 39-55; Col. 5, lines 45-68; Col. 6, lines 1-59).

Re claim 23, Fleming et al. discloses the test specimen (e.g., simulation test block 22) has the same elastic parameters as the material of the component (Col. 2, lines 23-25).

Re claim 24, Fleming et al. discloses the manufacturing of the test specimen (e.g., simulation test block 22) being performed in accordance with the specification (Col. 2, lines 23-31; Col. 4, lines 31-55).

Re claim 25, as depicted in figs. 1-4, and 6, Fleming et al. discloses detecting at least one flaw in a component (e.g., actual specimen or pipe or power plant component) and evaluating ultrasonic signals of the flaw. Fleming et al. discloses generating an specification of the flaw including at least one of a two-dimensional and three-dimensional point pattern (Col. 3, lines 1-68; Col. 4, lines 1-68; Col. 5, lines 45-68; Col. 6, lines 1-68). Fleming et al. discloses manufacturing a test specimen (e.g., simulation test block 22) for each point of the pattern (Col. 2, lines 23-39; Col. 3, lines 4-68; Col. 5, lines 45-56). Fleming et al. discloses a crack in the test specimen generated at a corresponding position (Col. 2, lines 23-26; Col. 4, lines 40-55).

Re claims 26 and 29, as depicted in figs. 1-4, and 6, Fleming et al. discloses detecting at least one flaw in a component (e.g., actual specimen or pipe or power plant component) and evaluating ultrasonic signals of the flaw. Fleming et al. discloses generating an specification of the flaw including at least one of a two-dimensional and three-dimensional point pattern (Col. 3, lines 1-68; Col. 4, lines 1-68; Col. 5, lines 45-68; Col. 6, lines 1-68). Fleming et al. discloses manufacturing a test specimen (e.g., simulation test block 22) for each point of the pattern (Col. 2, lines 23-39; Col. 3, lines 4-68; Col. 5, lines 45-56). Fleming et al. discloses a crack produced at a position of the point (Col. 2, lines 23-26; Col. 4, lines 40-55; col. 5, lines 65-68).

Re claim 27, Fleming et al. discloses the largest dimensions of the crack are smaller than a wavelength used for recording the ultrasonic signals (Col. 4, lines 39-55; Col. 5, lines 45-68; Col. 6, lines 1-59).

Re claim 30, as depicted in figs. 1-4, and 6, Fleming et al. discloses detecting at least one flaw in a component (e.g., actual specimen or pipe or power plant component) and evaluating ultrasonic signals of the flaw. Fleming et al. discloses a crack in the test specimen (e.g., simulation test block 22) (Col. 2, lines 23-26; Col. 4, lines 40-55). Fleming et al. discloses generating a specification of the flaw including at least one of a two-dimensional and three-dimensional point pattern that corresponds to a flaw (Col. 3, lines 1-68; Col. 4, lines 1-68; Col. 5, lines 45-68; Col. 6, lines 1-68).

Re claim 31, Fleming et al. discloses the largest dimensions of the crack are smaller than a wavelength used for recording the ultrasonic signals (Col. 4, lines 39-55; Col. 5, lines 45-68; Col. 6, lines 1-59).

Re claim 34, Fleming et al. discloses the test specimen (e.g., simulation test block 22) has the same elastic parameters as the material of the component (Col. 2, lines 23-25).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 19 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleming et al. (5,337,661) in view of Wienkamp et al. (DE10015702).

Re claims 19 and 28, Fleming et al. the manufacturing a test specimen (e.g., simulation test block 22) with implanted defects or from real life ultrasonic defects which have been recorded (Col. 2, lines 23-26). Fleming et al. lacks the detail of the defects produced in a manufacturing step by internal laser engraving. As depicted in fig. 1, Wienkamp et al. discloses manufacturing a crack (e.g., engraving 2) in a test specimen (e.g. work piece 2) by internal laser engraving. While Fleming et al. and Wienkamp et al. are not from the same analogous art, the court held that anticipation requires that a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of the claimed invention. In re King, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986); RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed, 468 U.S. 1228 (1984). Anticipation, however, does not require such disclosure *in haec verba*. In re Bode, 550 F.2d 656, 660, 193 USPQ 12, 16 (CCPA 1977). In addition, it does not require that the prior art reference "teach" what the application at issue teaches. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983). Finally, Applicant is reminded that during examination claim limitations are to be given their broadest reasonable reading. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). Therefore, to modify Fleming et al. by employing manufacturing a test specimen by internal engraving would have been obvious to one of ordinary skill in the art at the time

of the invention since Wienkamp et al. teaches an engraving device having these design characteristics. The skilled artisan would be motivated to combine the teachings of Fleming et al. and Wienkamp et al. since Fleming et al. states that his invention is applicable to manufacturing a test specimen and implanting a flaw and Wienkamp et al. is only used to show a device for implanting a flaw in to a test specimen by an internal laser engraving method.

5. Claims 21, 22, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleming et al. (5,337,661) in view of Balickas et al. (EP0743128).

Re claims 21 and 32, Fleming et al. the manufacturing a test specimen (e.g., simulation test block 22) with implanted defects or from real life ultrasonic defects which have been recorded (Col. 2, lines 23-26). Fleming et al. lacks the detail of the defects produced in a manufacturing step of a material transparent to visible light. As depicted in fig. 1, Balickas et al. discloses a manufacturing step of implanting a mark in a transparent material (5). While Fleming et al. and Balickas et al. are not from the same analogous art, the court held that anticipation requires that a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of the claimed invention. In re King, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986); RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed, 468 U.S. 1228 (1984). Anticipation, however, does not require such disclosure *in haec verba*. In re Bode, 550 F.2d 656, 660, 193 USPQ 12, 16 (CCPA 1977). In addition, it does not require that the prior art reference "teach" what

the application at issue teaches. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983). Finally, Applicant is reminded that during examination claim limitations are to be given their broadest reasonable reading. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). Therefore, to modify Fleming et al. by employing a test specimen in a manufacturing step of a transparent material would have been obvious to one of ordinary skill in the art at the time of the invention since Balickas et al. teaches an engraving device having these design characteristics. The skilled artisan would be motivated to combine the teachings of Fleming et al. and Balickas et al. since Fleming et al. states that his invention is applicable to manufacturing a test specimen and implanting a flaw and Balickas et al. is only used to show a device for implanting a flaw into a test specimen by made of a transparent material.

Re claims 22 and 33, Fleming et al. discloses the test specimen (e.g., simulation test block 22) is a pipe or power plant component. Fleming et al. lacks the detail of the test specimen that is formed of a material including at least one of crown glass, optical glass, borosilicate glass, and quartz glass. As depicted in fig. 1, Balickas et al. discloses a manufacturing step of implanting a mark in a transparent material (5). While Fleming et al. and Balickas et al. are not from the same analogous art, the court held that anticipation requires that a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of the claimed invention. In re King, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986); RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert.

dismissed, 468 U.S. 1228 (1984). Anticipation, however, does not require such disclosure *in haec verba*. In re Bode, 550 F.2d 656, 660, 193 USPQ 12, 16 (CCPA 1977). In addition, it does not require that the prior art reference "teach" what the application at issue teaches. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983). Finally, Applicant is reminded that during examination claim limitations are to be given their broadest reasonable reading. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). While Balickas et al. does not specifically state that the transparent material is a glass, the court held in In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960), that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. Therefore, to modify Fleming et al. by employing a test specimen formed of a glass material would have been obvious to one of ordinary skill in the art at the time of the invention since Balickas et al. teaches an engraving device having these design characteristics. The skilled artisan would be motivated to combine the teachings of Fleming et al. and Balickas et al. since Fleming et al. states that his invention is applicable to manufacturing a test specimen and implanting a flaw and Balickas et al. is only used to show a device for implanting a flaw into a test specimen by made of a transparent glass material.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMIKO D. BELLAMY whose telephone number is (571)272-2190. The examiner can normally be reached on Monday - Friday 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tamiko Bellamy
/TB/
September 12, 2008
/Hezron Williams/
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